DOCUMENT RESUME

ED 192 002 CE 026 123

AUTHOR Uzoaru, Ben
TITLE The Sociological and Economic Roots of Sex Discrimination.
PUB DATE [76]
NOTE 12p.: Preliminary Short Summary of the Full Paper.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Economic Development: *Economic Status; *Educational Discrimination; Enrollment; *Family Role; Females; Role Perception; Sex Bias; *Sex Discrimination; *Sex Role; Socioeconomic Influences
IDENTIFIERS Nigeria

ABSTRACT

Past studies on economic discrimination against women have dealt with existence and effects. An examination of how origins, nature, and causes of discrimination are socially determined during the pre-industrial stage of economic development focused on the experience of Nigeria as a case study. The existence of a family-oriented system in which the family is an economic unit, the husband is responsible for supporting the family, sons perpetuate the family name, and a scarcity of resources makes boy-biased educational expenditure a rational economic behavior. As income increases this bias decreases and female enrollment increases. Tabulated statistics on sex distribution in school enrollment in Nigeria from 1950 to 1970 affirm this pattern. During a pre-industrial stage with a boy-biased educational system, the labor market only validates the family structure and social values. As an economy develops it becomes less family-oriented and family and social value changes tend to equalize responsibility among individuals regardless of sex. The reality of equal responsibility without equal opportunity means an urgent need for action at the government, employer, and individual levels. Increased availability of adequate training for women coupled with increasing realization of their economic potential is the best road to change. (MN)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED192002

# THE SOCIOLOGICAL AND ECONOMIC ROOTS OF SEX DISCRIMINATION

Ben Uzoaru

Department of Economics
Memphis State University

This is a preliminary short summary of the full paper

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Ben Uzoaru

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."



CE026123

The increasing need for research on the economic roles of women was underscored by a recent study initiated by the Editor of the Journal of Economic Literature at the suggestion of the American Economic Association Committee on the Status of Women in the Economics Profession. (See Hilda Kahne.[15]) As Kahne pointed out, past studies of the sex discrimination problem dealt with the effects rather than the causes of this phenomenon. (p. 1,258) In his recent presidential address, Robert Gordon, president of the American Economic Association, lamented the economists' neglect of causes, ". . . we shy away from the big questions about how and why . . ."[9] (p. 1) An insight into the nature and causes of the sex discrimination problem promises the best avenue to an effective policy.

Past works have dealt with the existence and the effects of discrimination against women. Isabel Sawhill recently reviewed six studies which found gaps in earnings between men and women, in the range 12 percent to 37 percent, due to discrimination (after other factors were accounted for.)[6,8,18,22,23,24,26] Ruben Gronau indicated in another study that men specialized in market work and women in household work because the ". . . husbands' wage rates as a rule exceed those of wives."[11] (p. 635) Several studies found that earnings differentials were associated with occupational segregation.[5,13,14,30] The most important piece of economic theory to date on discrimination is that of the neoclassical model of discrimination.[4] According to this model, the discriminating employer has a taste for discrimination. He is willing to pay an extra money wage, d, the coefficient of discrimination, to associate with those in favor of whom he discriminates. Given a normal wage rate, W, his wage rate is W + d with d positive for those he favors and negative for those against whom he discriminates. The implication of this

model is that for discrimination to last for a long time, all employers must behave in a similar way, since otherwise the discriminator would soon be forced out of the market due to the higher cost of production associated with the higher price he pays to discriminate. About this model, Kenneth Arrow pointed out that "Since in fact racial discrimination has survived for a long time, we must assume that the model must have some limitations."[1] (p. 10) Ray Marshall attempted to specify the model's limitations, stating that "An economic theory of discrimination should show how discrimination interacts with the motives of certain economic actors."[16] (p. 859)

This study, unlike past works on the problem of sex discrimination, deals with the origins, nature, and causes of the problem. It is concerned with the motives of the discriminating economic agents and how such motives are socially determined during the pre-industrial stage of economic development. Specifically, the case study presented here deals with the way in which, during such a stage: (a) an extended family system or a family-oriented system in which the family is the economic unit; (b) a socially determined sex-linked assignment of family responsibility which dictates that the husband is responsible for the economic support of his family; (c) a genealogical system which assigns to the son rather than the daughter the responsibility (or makes him the medium) for perpetuating the name of the family; and (d) a scarcity of resources for education; all these factors act together to make a boy-biased expenditure on education a family utility maximizing and rational economic behavior. The scarcity of income for education forces the family to ration education among the children. Due to condition (a), the family and its members are one and the same thing. Decisions, whether they are made by members of the family

as a group, are made on a family rather than individual basis. Condition (b) adds an extra utility to preparing the son through education for the responsibilities of a future husband, assuming the the family of the daughter's future husband is similarly preparing their son. Condition (c) implies that an adequate preparation of the son is equivalent to an adequate preparation for the continuation of the name of the family, again on the assumption that the daughter will eventually assume the name of her husband's family and that her future husband is being similarly prepared by his family. This model of family utility maximizing behavior implies that income scarcity is associated with a rationing of education, education being boy-biased, and bias decreasing as income increases, until eventually the average family achieves the pride and satisfaction of being able to educate all the children regardles of their sex.

Table 1 shows the sex distribution of school enrollment in Nigeria from 1950 to 1970, for all levels--first level (primary), second level (secondary), and third level (university.) Table 2 shows income (gross domestic product) for the same period. The population figures in Table 3 help to highlight the boy-biased nature of expenditure on education. While the population is at least 50 percent female, the percent female of pupils enrolled has varied from 22 percent to 37 percent for the first level; from 11 percent o 32 percent for the second level; and from 4 percent to 14 percent for the third level during the period under study. The association between the percent female enrollment and income is shown by the regression results in Table 4. As income increases, the boy-bias decreases, and the percent female enrollment increases, in accordance with the family utility maximizing ration of education. The

regression results apply to equations expressing percent female enrollment for level i at time t, $(PFE)_{it}$, to be a function of income at time t, $Y_{it}$, as follows: $(PFE)_{it} = a_i + b_i Y_{it} + e_{it}$

where a and b are constants, e is the stochastic error term, and

$i = 1, 2, 3.$

The results indicate that as income goes up by one million pounds, the percent female enrollment at the first level, second level, and third level go up by 1.7 percent, 2.4 percent, and 1.1 percent respectively. The limitations to be brought to the attention of the reader are, first, the smallness of the number of observations. For instance, the degrees of freedom are as low as 5 for the first level (primary school.) Second, three out of twelve states are not included during the period covering the Nigerian civil war.

Education prepares the individual for an effective participation in the labor force. During the pre-industrial stage with a boy-biased education system, the labor market only validates the family structure and social values by being male-biased. But, as the economy develops, economic activities tend to become less farm or family oriented while becoming more factory or urban oriented. The capacity for family structure and social value to adjust to economic changes is demonstrated by evidence from an industrialized country such as the United States. The trend is away from the extended and tight family structure to loosely extended families, immediate families, and the single lifestyle. In the United States, the percentage of all families headed by women was 10 percent in 1960 and by 1970 it was up to 11 percent.[25] (p. 117) In 1964, women 20 to 24 years old who were never married was 2.002 million and they accounted for 31.1 percent of women in that age group. By 1974, their number was 3.64

Table 1

SCHOOL ENROLLMENT 1950-1970

| | First Level | | | Second Level | | | Third Level | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Female | %F | Total | Female | %F | Total | Female | %F |
| 1950 | 921,397 | 204,922 | 22 | 28,962 | 3,141 | 11 | 321 | 14 | 4 |
| 1955 | 1,658,196 | 504,642 | 30 | | | | | | |
| 1956 | 2,912,617 | 1,083,146 | 37 | 63,254 | 10,879 | 17 | 1,110 | | |
| 1960 | | | | 166,765 | 34,931 | 21 | | | |
| 1961 | | | | | | | 3,128 | 247 | 8 |
| 1965 | 2,011,742 | 1,120,179 | 38 | 250,917 | 71,296 | 28 | 8,933 | 1,124 | 13 |
| 1967* | 1,778,976 | 673,103 | 38 | 172,766 | 51,527 | 29 | 8,076 | 1,078 | 13 |
| 1963* | | | | 200,378 | 58,766 | 29 | 9,775 | 1,395 | 14 |
| 1969* | | | | | | | 11,507 | 1,559 | 14 |
| 1970* | 3,515,827 | 1,299,598 | 37 | 356,565 | 114,272 | 32 | 14,510 | 2,066 | 14 |

Source: United Nations Educational, Scientific, and Cultural Organization (UNESCO), UNESCO Statistical Yearbook, Paris, Annual editions.

*The three Eastern States, out of twelve States, are not included.

Table 2
GROSS DOMESTIC PRODUCT 1950-1970
(AT CONSTANT 1962-63 PRICES)

| Year | Millions of Nigerian Pounds |
|---|---|
| 1950 | 847.8 |
| 1951 | 912.6 |
| 1952 | 976.8 |
| 1953 | 999.1 |
| 1954 | 1,073.5 |
| 1955 | 1,102.0 |
| 1956 | 1,075.5 |
| 1957 | 1,120.2 |
| 1958 | 1,107.9 |
| 1959 | 1,115.2 |
| 1960 | 1,246.7 |
| 1961 | 1,246.1 |
| 1962 | 1,298.8 |
| 1963 | 1,412.8 |
| 1964 | 1,473.8 |
| 1965 | 1,573.4 |
| 1966 | 1,522.4 |
| 1967 | 1,286.1* |
| 1968 | 1,271.9* |
| 1969 | 1,602.9* |
| 1970 | 1,701.5* |

Source: Nigeria Federal Office of Statistics, Economic Indicators, Lagos, Monthly editions.

*The three Eastern States, out of twelve States, are not included.

Table 3

POPULATION OF NIGERIA

| Census | Population in Thousands | | |
|---|---|---|---|
| | Total | Female | %F |
| 1952-53 | 30,402 | 15,541 | 51 |
| 1963 | 55,670 | 27,558 | 50 |

Source: Census data for 1952-53, Nigeria Federal Office of Statistics, Annual Abstract of Statistics, Lagos, 1963, p. 21, Census data for 1963, Nigeria Federal Office of Statistics, Digest of Statistics, Lagos, 1970, p. 4.

Table 4

SUMMARY OF REGRESSION STATISTICS OF THE MODEL OF PERCENT FEMALE ENROLLMENT

| Level | $a_i$ | $b_i$ | $R^2$ | Standard Error |
|---|---|---|---|---|
| 1st Level | 10.124 | .17* (2.32) | .52 | 5.206 |
| 2nd Level | - 6.819 | .024* (3.97) | .76 | 4.250 |
| 3rd Level | - 3.122 | .11* (2.55) | .62 | 2.805 |

Note: Number in parentheses are t-values.

*Indicates coefficient significant at the 5 percent level.

million and they accounted for 39.6 percent of the group.[12] (p. 6)

The above-mentioned family and social value changes tend to equalize responsibility among individuals regardless of sex and consequently tends to equalize the need for participation in the labor force. For 1950, 1955, 1960, 1965, 1970, 1973, and 1974, the labor force participation rates for married women with husband present were 23.8, 27.7, 30.5, 34.7, 40.8, 42.2, and 43.0 percent respectively.[28] (p. 57)

The resistance of the labor market to adjust to changes in the family structure and social values is explained by, among other variables, the risk-avoiding behavior of profit-seeking employers. Change involves uncertainty which in turn is associated with uncertainty and risk. In addition to this is what is described in the April 1975 Manpower Report of the President as sex stereotyping of jobs and outmoded concepts.[28] (p. 69) The harsh realities of equal responsibility without equal opportunity mean an urgent need for action at three levels. At the government

level is a need for effective policy to facilitate the equalization of opportunity. At the employer level is a need for a change in attitude to remove or minimize the artificial part of the uncertainty associated with the hiring of women. At the individual level is a need for a change in attitude and behavior which has in the past reinforced employers' discriminatory behavior. The increasing availability of adequate training for women to effectively participate in the labor force, coupled with an increasing realization of their economic potential, will be the most essential catalyst for change.

REFERENCES


1. K. J. Arrow, "The Theory of Discrimination," in O. Ashenfelter and A. Rees, eds., Discrimination in Labor Markets, Princeton, New Jersey 1973, 3-33.

2. G. S. Becker, Human Capital, New York 1964.

3. _____, "A Theory of the Allocation of Time," Economic Journal, September 1965, 75, 493-517.

4. _____, The Economics of Discrimination, 2nd ed., Chicago 1971.

5. B. R. Bergmann, "Occupational Segregation, Wages and Profits When Employers Discriminate by Race or Sex," Eastern Economic Journal, April/July 1974, 1, 103-10.

6. M. S. Cohen, "Sex Differences in Compensation," Journal of Human Resources, Fall 1971, 6, 434-47.

7. O. D. Duncan, "Comment," Journal of Political Economy, Part II, March/April 1974, 82, S109-S110.

8. V. Fuchs, "Differences in Hourly Earnings Between Men and Women," Monthly Labor Review, May 1971, 94, 9-15.

9. R. A. Gordon, "Rigor and Relevance in a Changing Institutional Setting," American Economic Review, March 1976, 66, 1-14.

10. M. Greenstreet, "Employment of Women in Ghana," International Labor Review, February 1971, 103, 117-29.

11. R. Gronau, "The Intrafamily Allocation of Time: The Value of the Housewives' Time," American Economic Review. September 1973, 634-51.

12. A. S. Grossman, "Women in the Labor Force: The Early Years," Monthly Labor Review, November 1975, 98, 3-9.

13. H. Hayghe, "Marital and Family Characteristics of the labor Force in March 1973," Monthly Labor Review, April 1974, 97, 21-27.

14. J. N. Hedges, "Women Workers and Manpower Demands in the 1970's," Monthly Labor Review, June 1970, 93, 19-29.

15. H. Kahne, "Economic Perspectives on the Roles of Women in the American Economy," Journal of Economic Literature, December 1975, 13, 1,249-92.

16. R. Marshall, "The Economics of Racial Discrimination: A Survey," Journal of Economic Literature, September 1974, 12, 849-71.

17. J. Mincer and S. W. Polachek, "Family Investments in Human Capital: Earnings of Women," Journal of Politial Economy, Part II, March/April 1974, 82, S76-S108.

18. J. N. Morgan et al., Income and Welfare in the United States, New York 1962.

19. Nigeria Federal Office of Statistics, Annual Abstract of Statistics, Lagos 1963.

20. _____, Digest of Statistics, Lagos 1970.

21. _____, Economic Indicators, Lagos, Monthly editions.

22. R. Oaxaca, "Male-Female Wage Differentials in Urban Labor Markets," in O. Ashenfelter and A. Rees, eds., Discrimination in Labor Markets, Princeton, New Jersey 1973, 124-51.

23. H. Sanborn, "Pay Differences Between Men and Women," Industrial and Labor Relations Review, July 1964, 17, 534-50.

24. I. V. Sawhill, "The Economics of Discrimination Against Women: Some New Findings," Journal of Human Resources, Summer 1973, 8, 383-96.

25. R. L. Stein, "The Economic Status of Families Headed by Women," in United States Department of Labor, Bureau of Labor Statistics, ed., Monthly Labor Review Reader, Bulletin 1868, Washington 1975, 116-23.

26. L. E. Suter and H. Miller, "Income Differences Between Men and Women," American Journal of Sociology, January 1973, 78, 962-74.

27. United Nations Educational, Scientific, and Cultural Organization (UNESCO), UNESCO Statistical Yearbook, Paris, Annual editions.

28. United States Department of Labor, Manpower Report of the President, Washington, April 1975.

29. _____, Women's Bureau, Facts About Women Heads of Household and Heads of Families, Washington 1973.

30. H. Zellner, "Discrimination Against Women, Occupational Segregation, and the Relative Wage," American Economic Review, May 1972, 62, 157-60.